

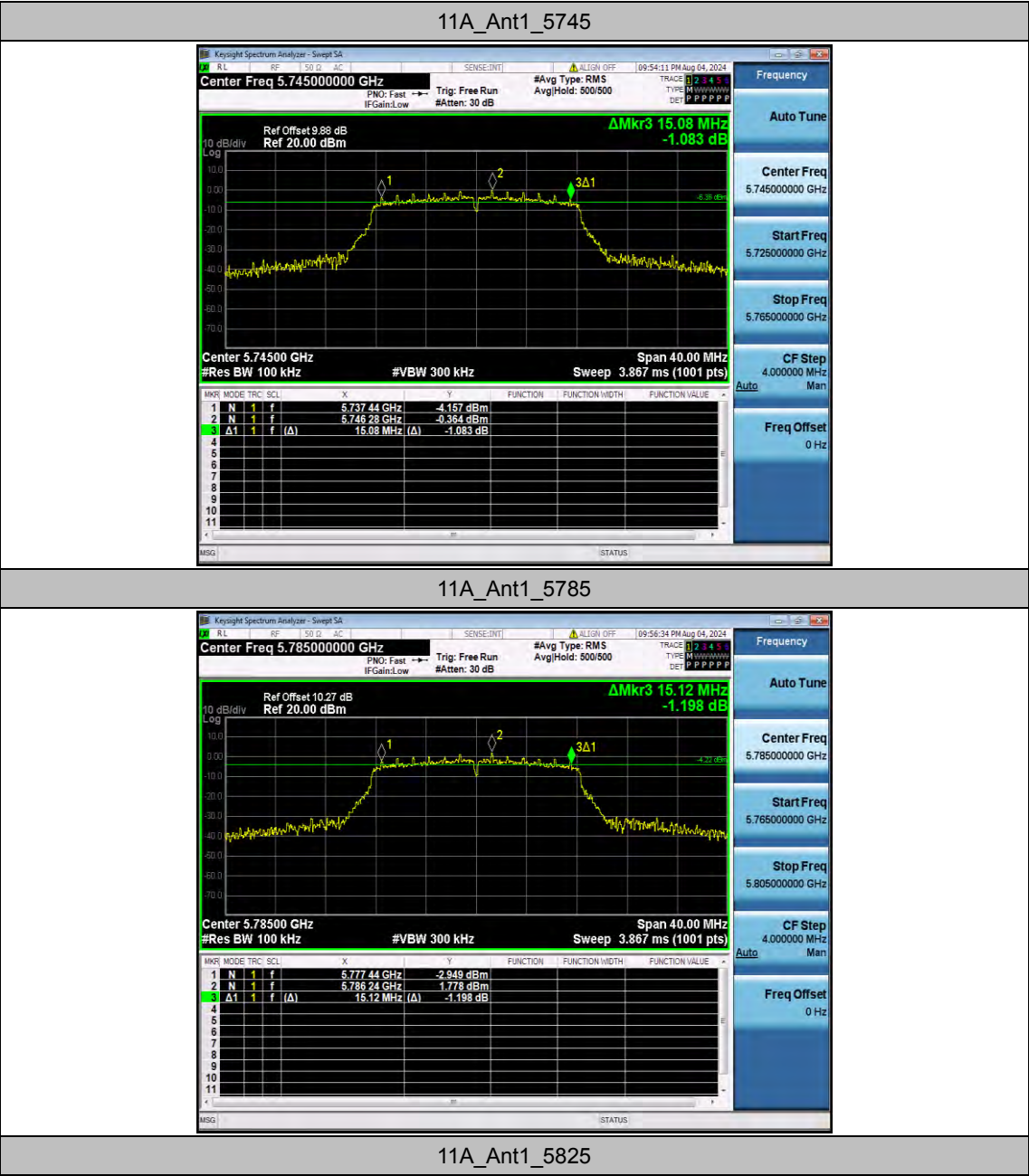
Case No. : <u>CTA24071502304</u>	
Ambient Condition: <u>22</u> °C, <u>52</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.8.4</u>	Test Engineer: <u>Lushan Kong</u>

Appendix G.1: Min emission bandwidth

Test Result B4

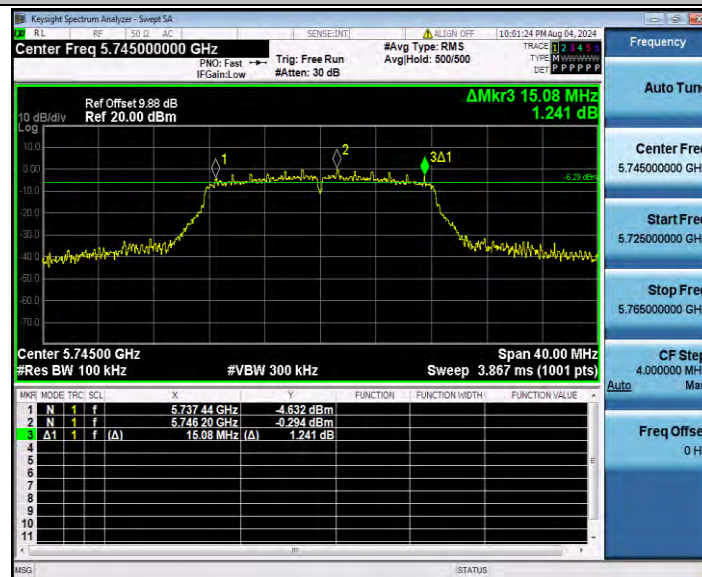
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.080	5737.440	5752.520	0.5	PASS
		5785	15.120	5777.440	5792.560	0.5	PASS
		5825	15.080	5817.480	5832.560	0.5	PASS
11N20SISO	Ant1	5745	15.080	5737.440	5752.520	0.5	PASS
		5785	15.120	5777.440	5792.560	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11N40SISO	Ant1	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.120	5737.440	5752.560	0.5	PASS
		5785	15.080	5777.440	5792.520	0.5	PASS
		5825	15.960	5817.400	5833.360	0.5	PASS
11AC40SISO	Ant1	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

Test Graphs B4





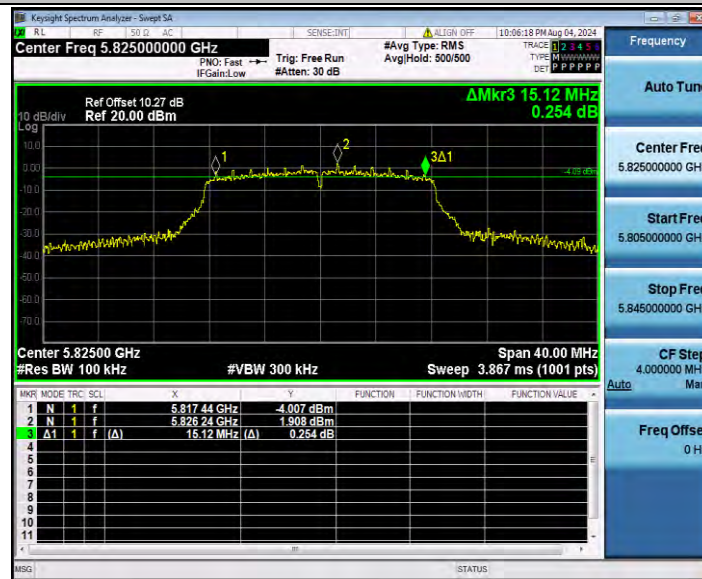
11N20SISO_Ant1_5745



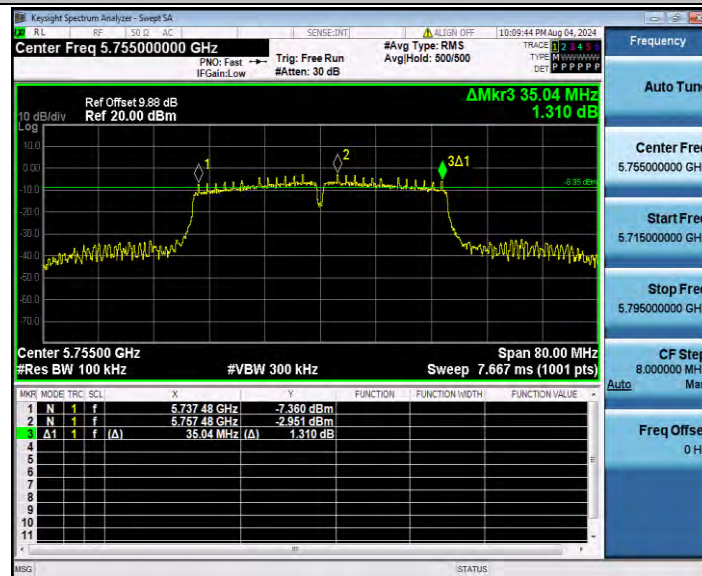
11N20SISO_Ant1_5785



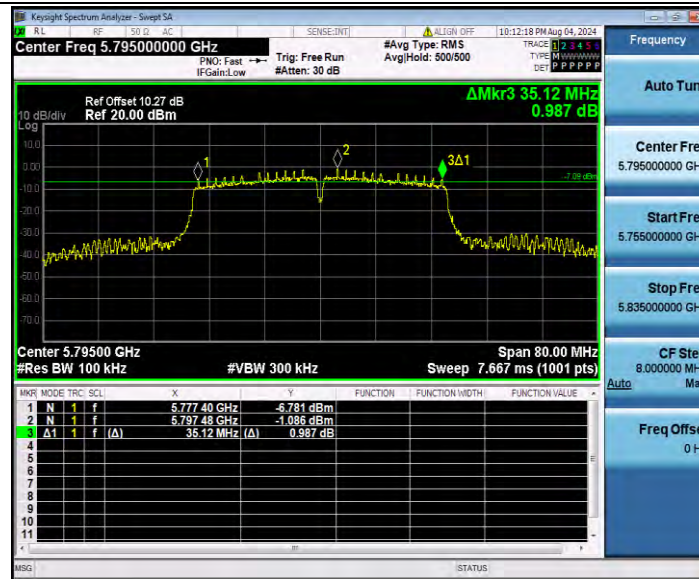
11N20SISO_Ant1_5825



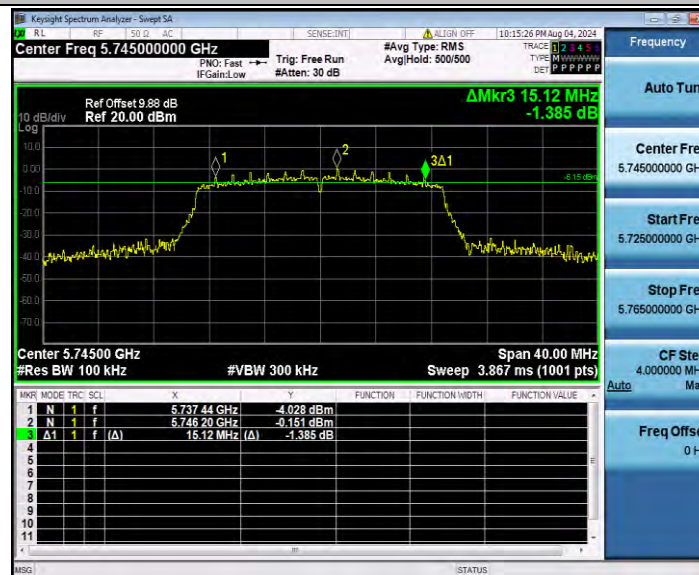
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



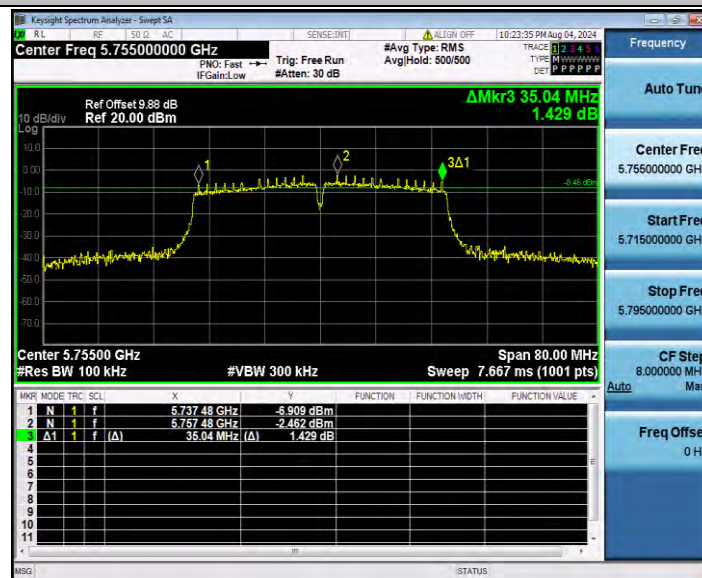
11AC20SISO_Ant1_5785



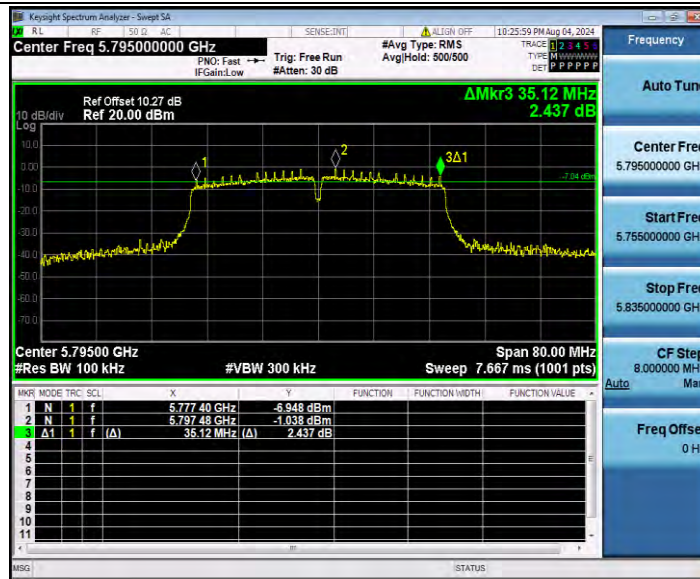
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



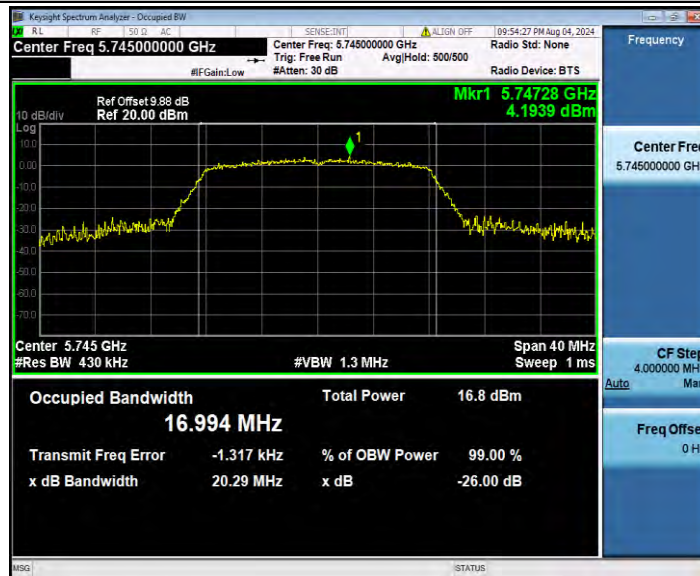
Appendix G.2: Occupied channel bandwidth

Test Result

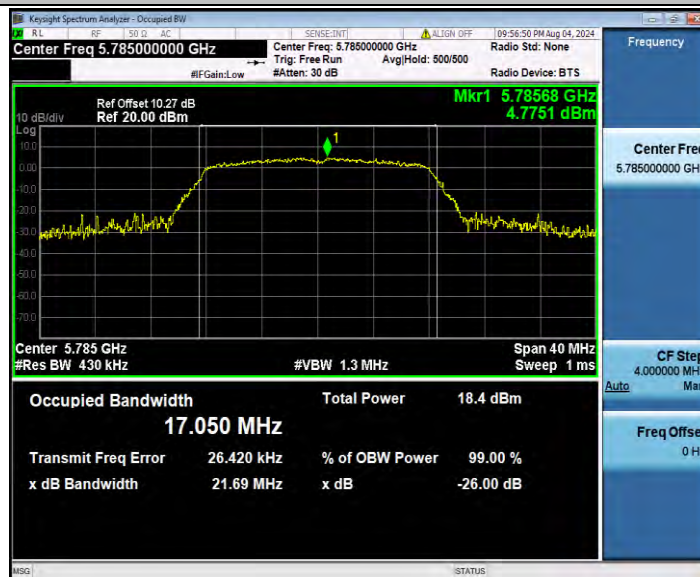
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.994	5736.5017	5753.4957	---	---
		5785	17.050	5776.5014	5793.5514	---	---
		5825	17.121	5816.4790	5833.6000	---	---
11N20SISO	Ant1	5745	17.024	5736.5165	5753.5405	---	---
		5785	16.994	5776.5298	5793.5238	---	---
		5825	17.087	5816.4815	5833.5685	---	---
11N40SISO	Ant1	5755	36.826	5736.7372	5773.5632	---	---
		5795	36.725	5776.7779	5813.5029	---	---
11AC20SISO	Ant1	5745	17.929	5736.0505	5753.9795	---	---
		5785	17.967	5776.0314	5793.9984	---	---
		5825	17.957	5816.0588	5834.0158	---	---
11AC40SISO	Ant1	5755	36.503	5736.8315	5773.3345	---	---
		5795	36.375	5776.9271	5813.3021	---	---
11AC80SISO	Ant1	5775	75.363	5737.5767	5812.9397	---	---

Test Graphs

11A_Ant1_5745



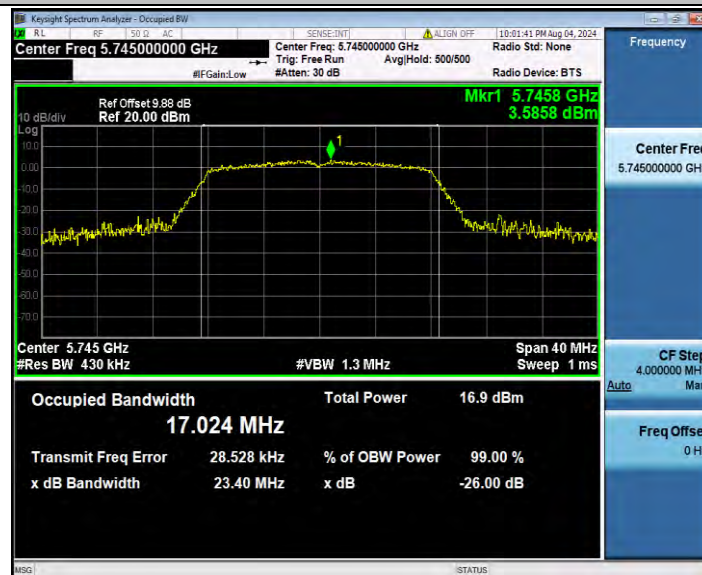
11A_Ant1_5785



11A_Ant1_5825



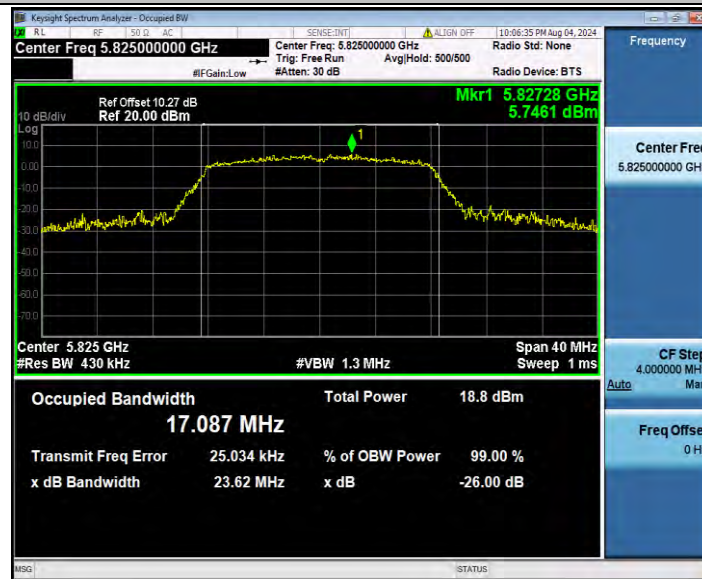
11N20SISO_Ant1_5745



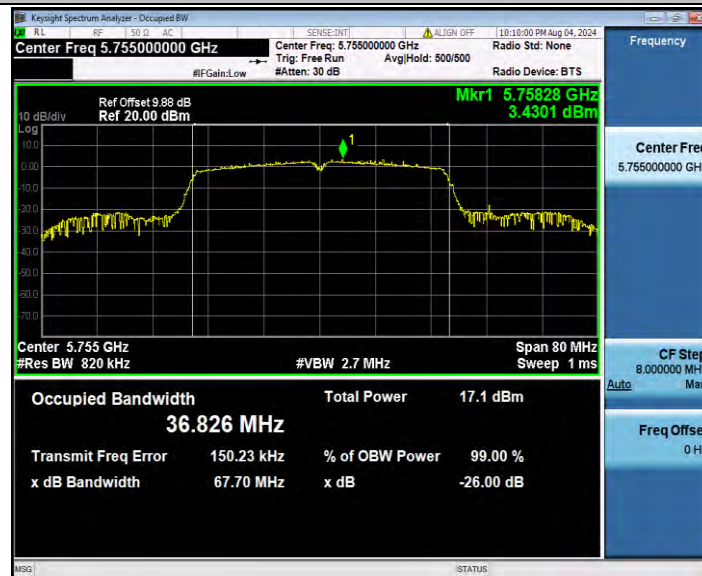
11N20SISO_Ant1_5785



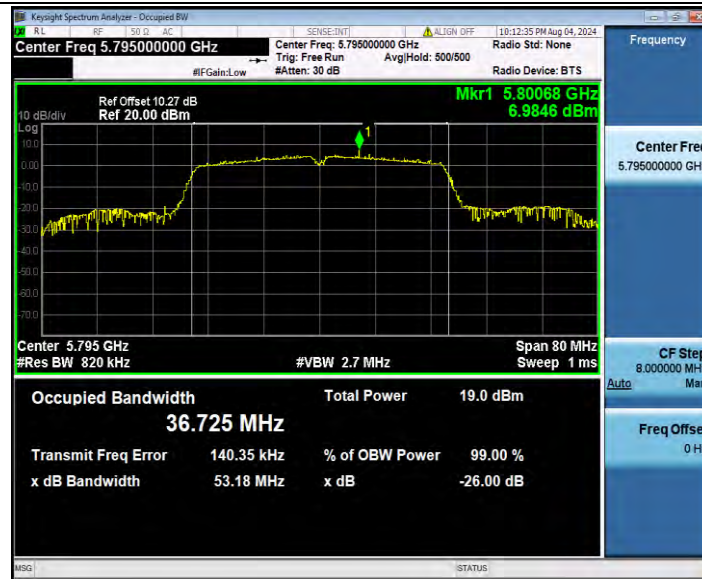
11N20SISO_Ant1_5825



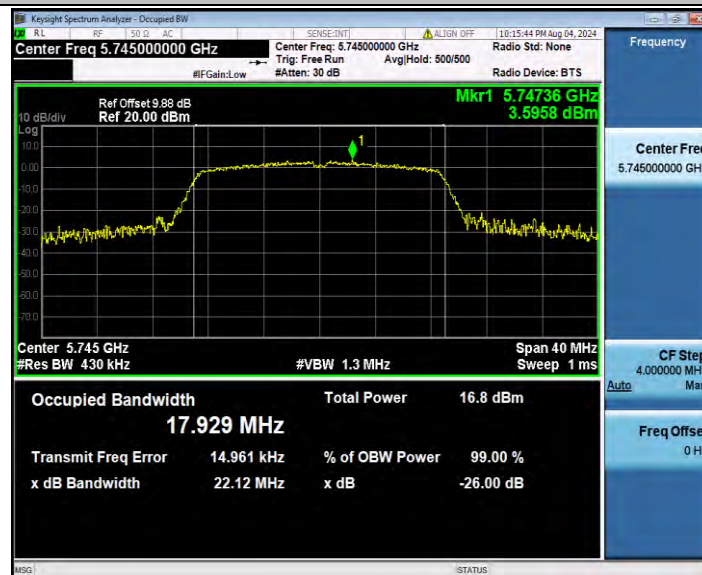
11N40SISO_Ant1_5755



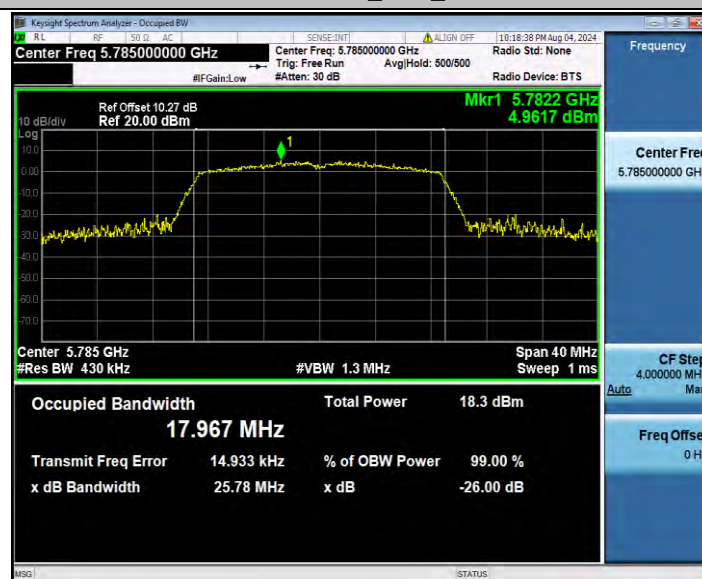
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



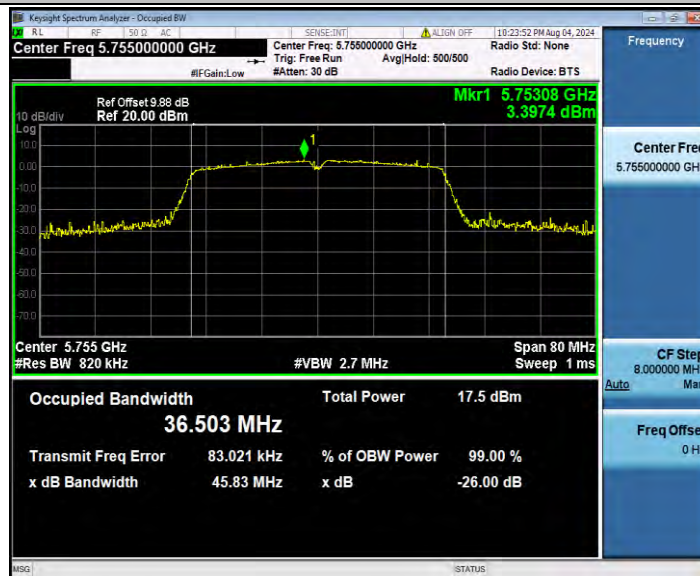
11AC20SISO_Ant1_5785



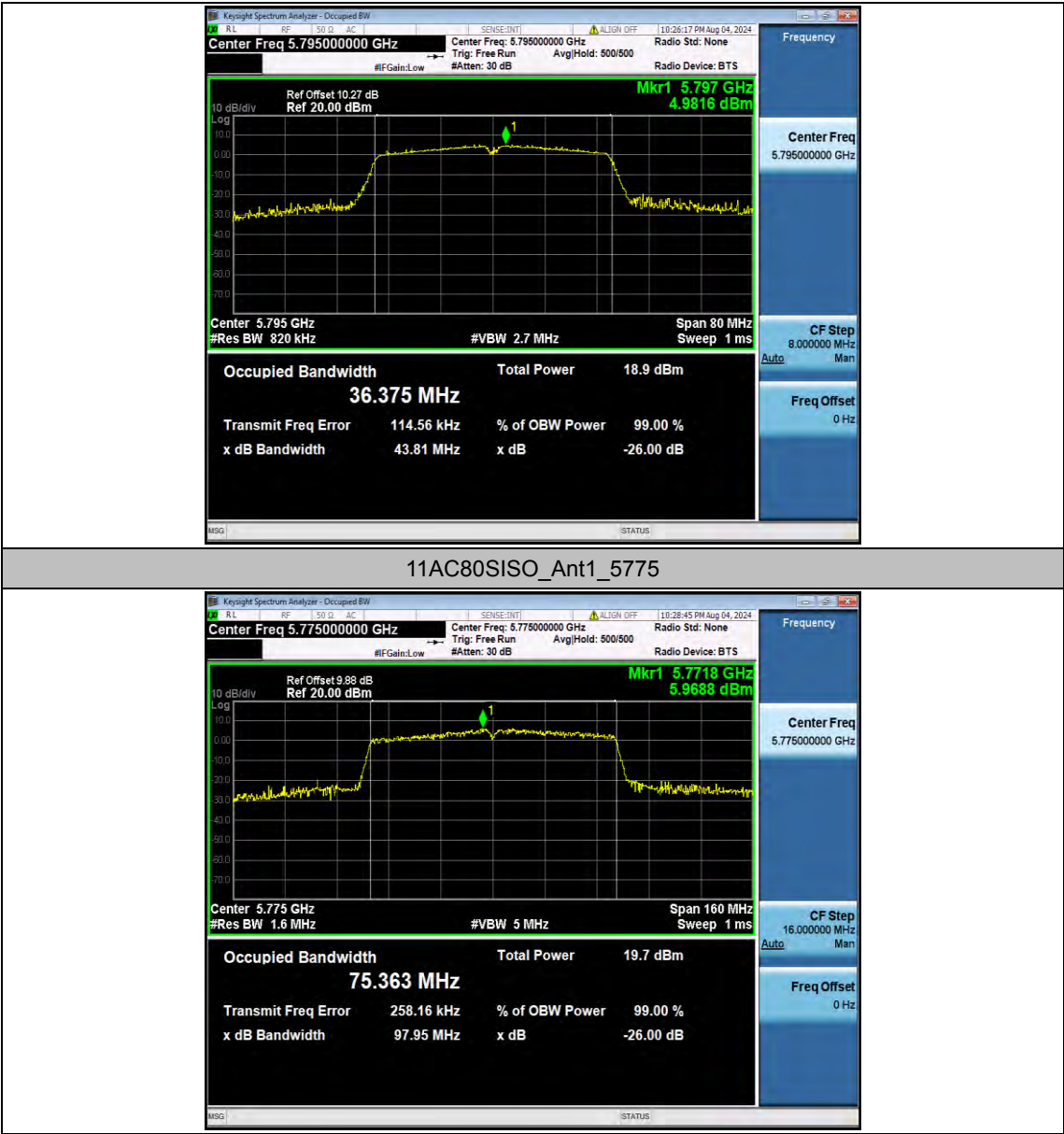
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



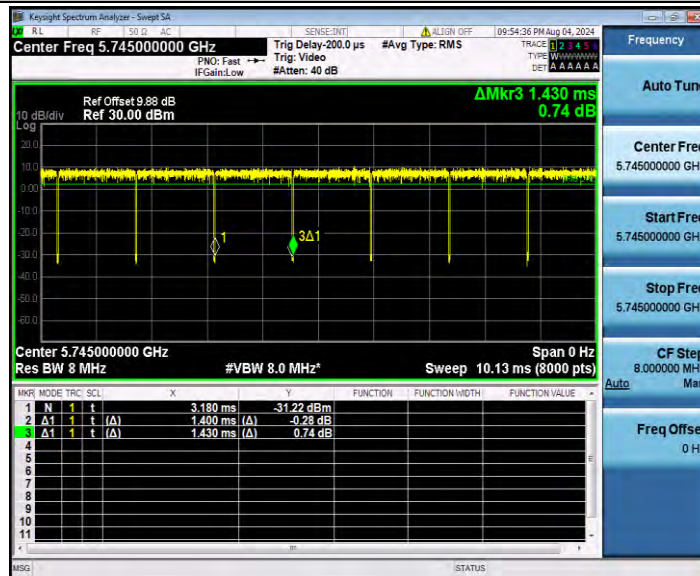
Appendix G.3: Duty Cycle

Test Result

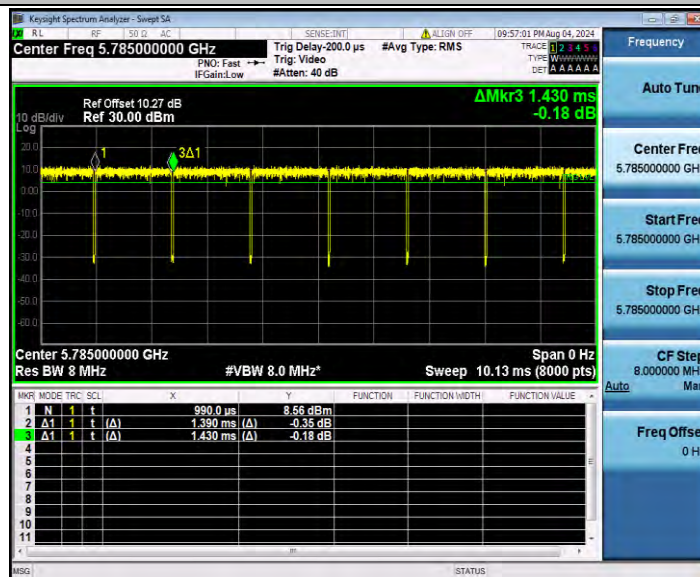
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5745	1.40	1.43	97.90	0.09	0.71
		5785	1.39	1.43	97.20	0.12	0.72
		5825	1.39	1.43	97.20	0.12	0.72
11N20SISO	Ant1	5745	1.39	1.43	97.20	0.12	0.72
		5785	1.39	1.43	97.20	0.12	0.72
		5825	1.39	1.43	97.20	0.12	0.72
11N40SISO	Ant1	5755	0.65	0.68	95.59	0.20	1.54
		5795	0.65	0.69	94.20	0.26	1.54
11AC20SISO	Ant1	5745	1.31	1.35	97.04	0.13	0.76
		5785	1.31	1.35	97.04	0.13	0.76
		5825	1.31	1.35	97.04	0.13	0.76
11AC40SISO	Ant1	5755	0.65	0.69	94.20	0.26	1.54
		5795	0.65	0.69	94.20	0.26	1.54
11AC80SISO	Ant1	5775	0.32	0.36	88.89	0.51	3.13

Test Graphs

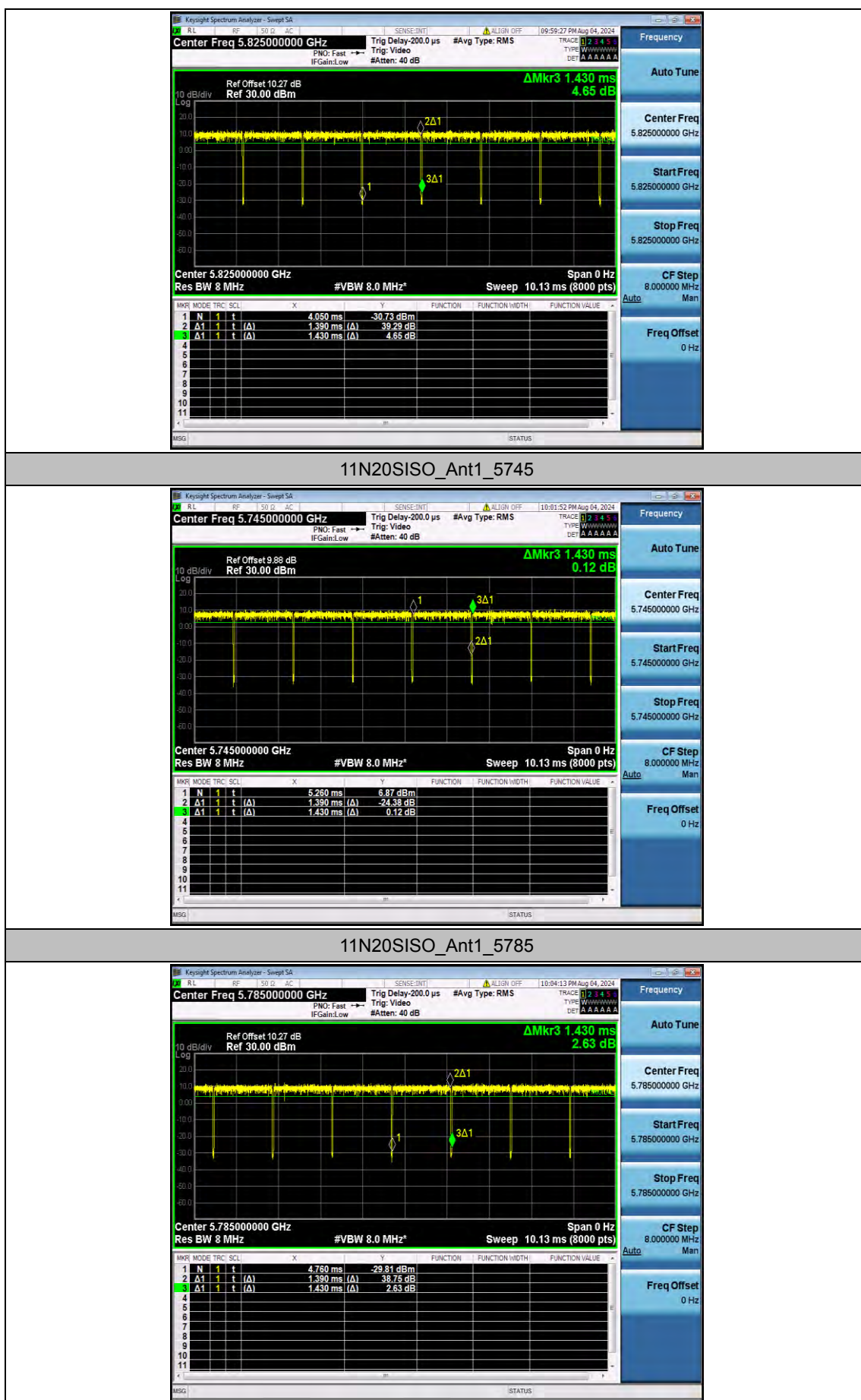
11A_Ant1_5745



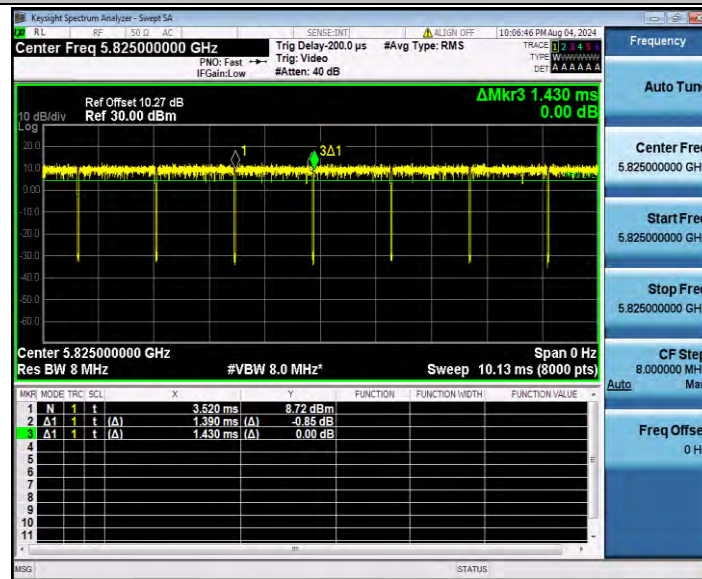
11A_Ant1_5785



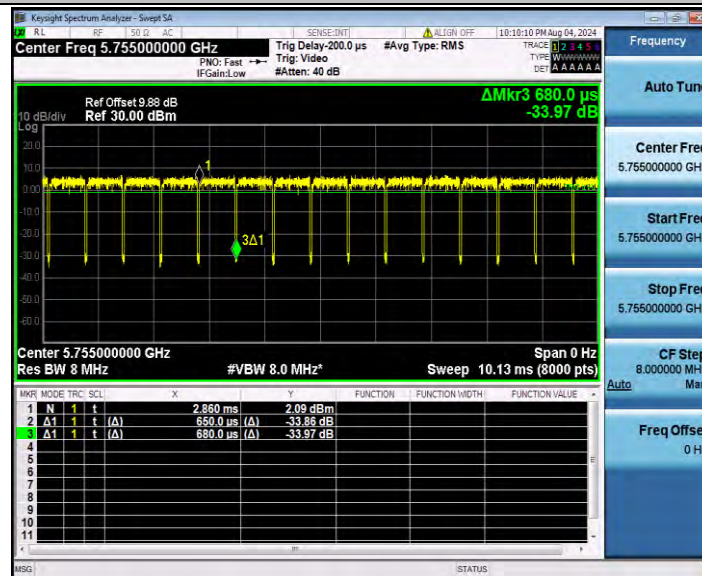
11A_Ant1_5825



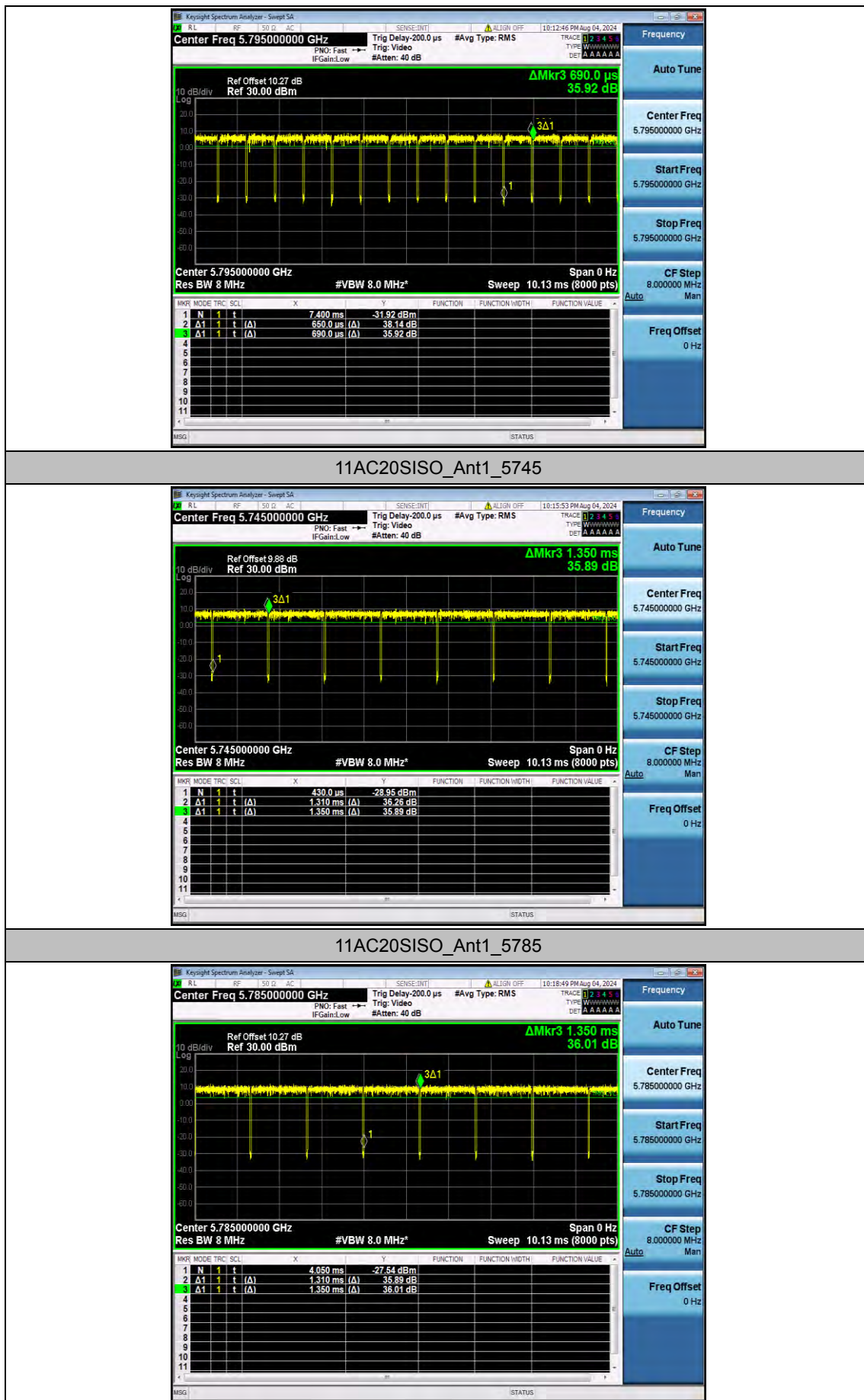
11N20SISO_Ant1_5825



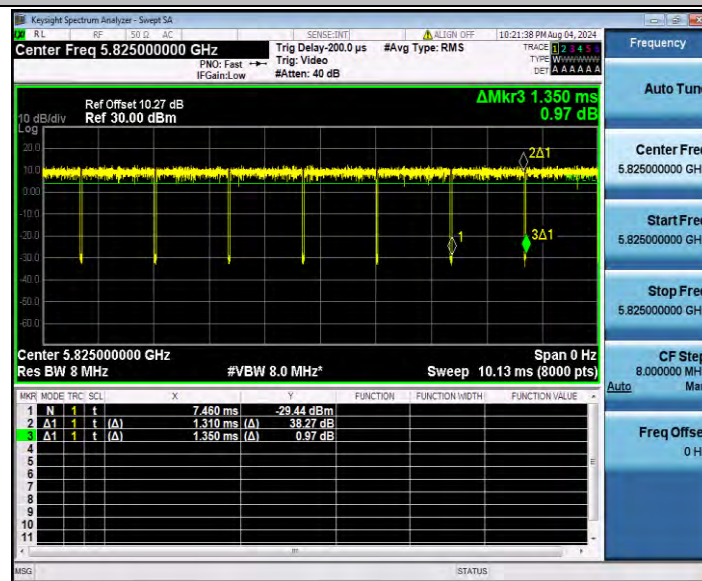
11N40SISO_Ant1_5755



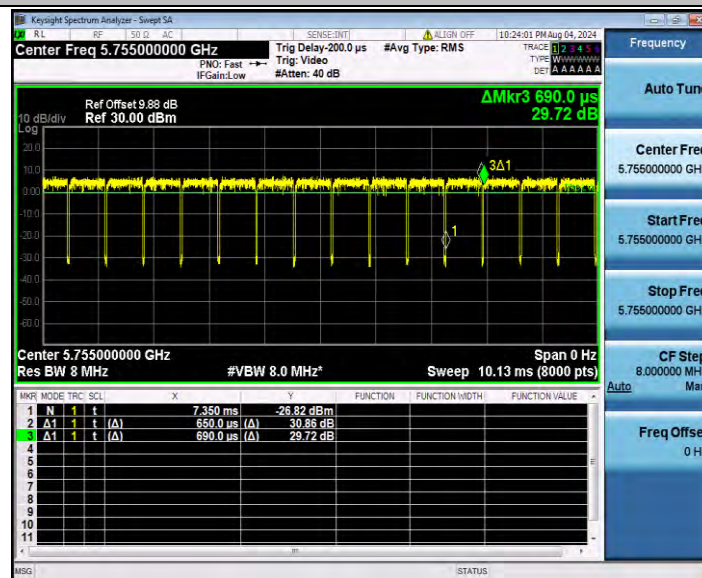
11N40SISO_Ant1_5795



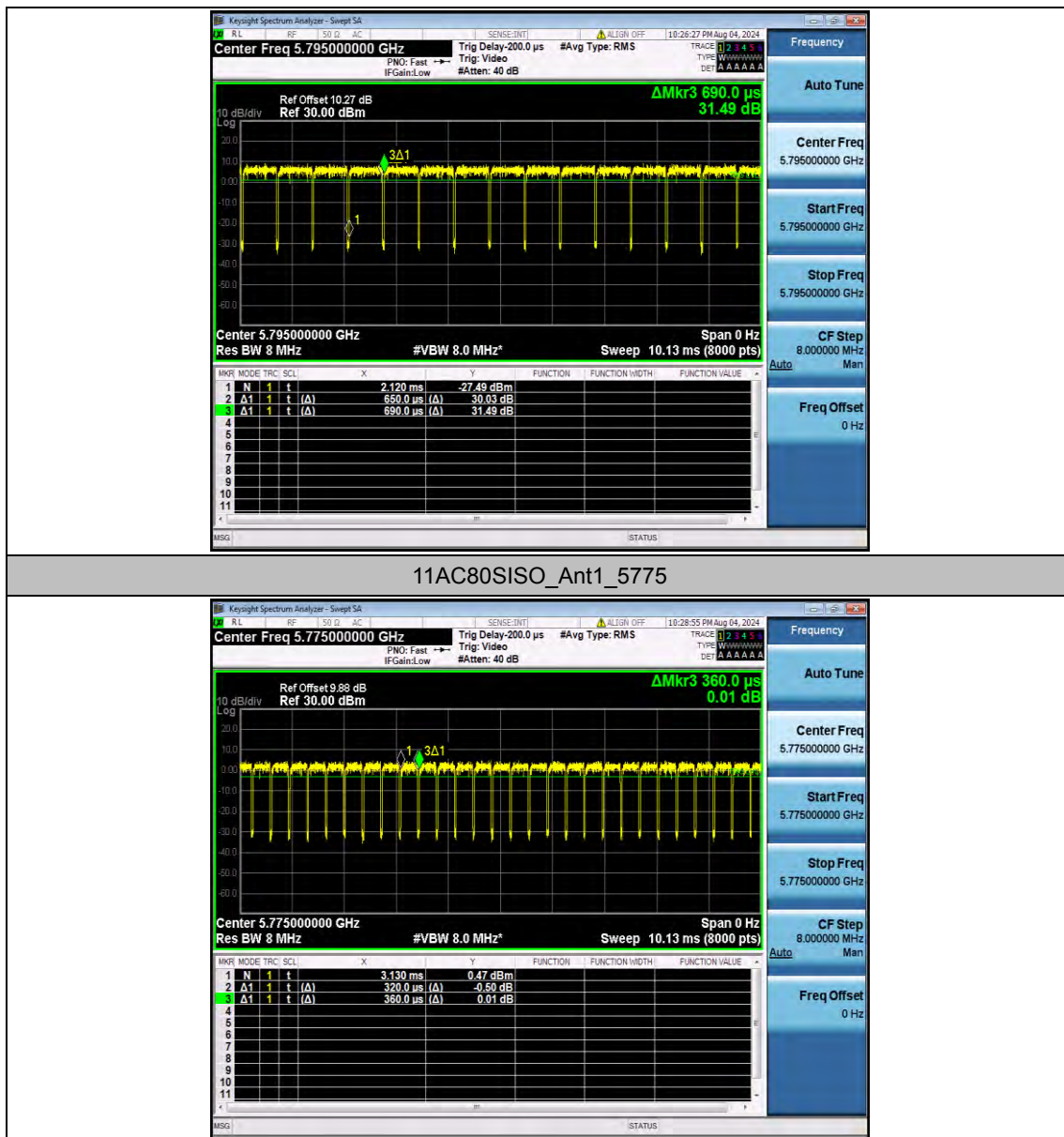
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix G.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	9.95	97.90	0.09	10.04	≤30.00	PASS
		5785	11.61	97.20	0.12	11.73	≤30.00	PASS
		5825	12.01	97.20	0.12	12.13	≤30.00	PASS
11N20SISO	Ant1	5745	10.03	97.20	0.12	10.15	≤30.00	PASS
		5785	11.61	97.20	0.12	11.73	≤30.00	PASS
		5825	11.94	97.20	0.12	12.06	≤30.00	PASS
11N40SISO	Ant1	5755	9.46	95.59	0.20	9.66	≤30.00	PASS
		5795	11.34	94.20	0.26	11.60	≤30.00	PASS
11AC20SISO	Ant1	5745	9.94	97.04	0.13	10.07	≤30.00	PASS
		5785	11.47	97.04	0.13	11.60	≤30.00	PASS
		5825	11.91	97.04	0.13	12.04	≤30.00	PASS
11AC40SISO	Ant1	5755	9.96	94.20	0.26	10.22	≤30.00	PASS
		5795	11.34	94.20	0.26	11.60	≤30.00	PASS
11AC80SISO	Ant1	5775	10.28	88.89	0.51	10.79	≤30.00	PASS

Appendix G.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-3.27	≤30.00	PASS
		5785	-1.69	≤30.00	PASS
		5825	-1.22	≤30.00	PASS
11N20SISO	Ant1	5745	-3.28	≤30.00	PASS
		5785	-1.64	≤30.00	PASS
		5825	-1.24	≤30.00	PASS
11N40SISO	Ant1	5755	-6.43	≤30.00	PASS
		5795	-4.65	≤30.00	PASS
11AC20SISO	Ant1	5745	-3.53	≤30.00	PASS
		5785	-1.88	≤30.00	PASS
		5825	-1.57	≤30.00	PASS
11AC40SISO	Ant1	5755	-6.07	≤30.00	PASS
		5795	-4.76	≤30.00	PASS
11AC80SISO	Ant1	5775	-8.47	≤30.00	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
 2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5745



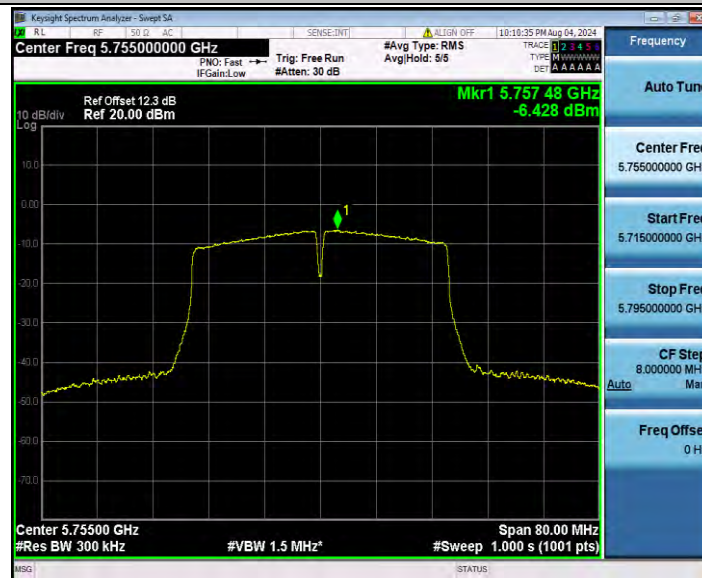
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

Keysight Spectrum Analyzer - Seregi SA

RF 50.0 AC ALIGN DEF 10:29:19 PM Aug 04, 2024

Center Freq 5.775000000 GHz

PNO: Fast Trg: Free Run #Avg Type: RMS
IFGain: Low #Atten: 30 dB Avg/Hold: 5/5

TRACE 1 2 3 4 5
TYPE M W W W W W W W
DET A A A A A A A

10 dB/div Ref Offset 12.61 dB
Log Ref 20.00 dBm

Mkr1 5.778 68 GHz
-8.467 dBm

Center Freq 5.77500000 GHz

Start Freq 5.695000000 GHz

Stop Freq 5.855000000 GHz

CF Step 16.000000 MHz
Auto Man

Freq Offset 0 Hz

Center 5.77500 GHz Span 160.0 MHz
#Res BW 300 kHz #VBW 1.5 MHz* #Sweep 1.000 s (1001 pts)

MSO STATUS

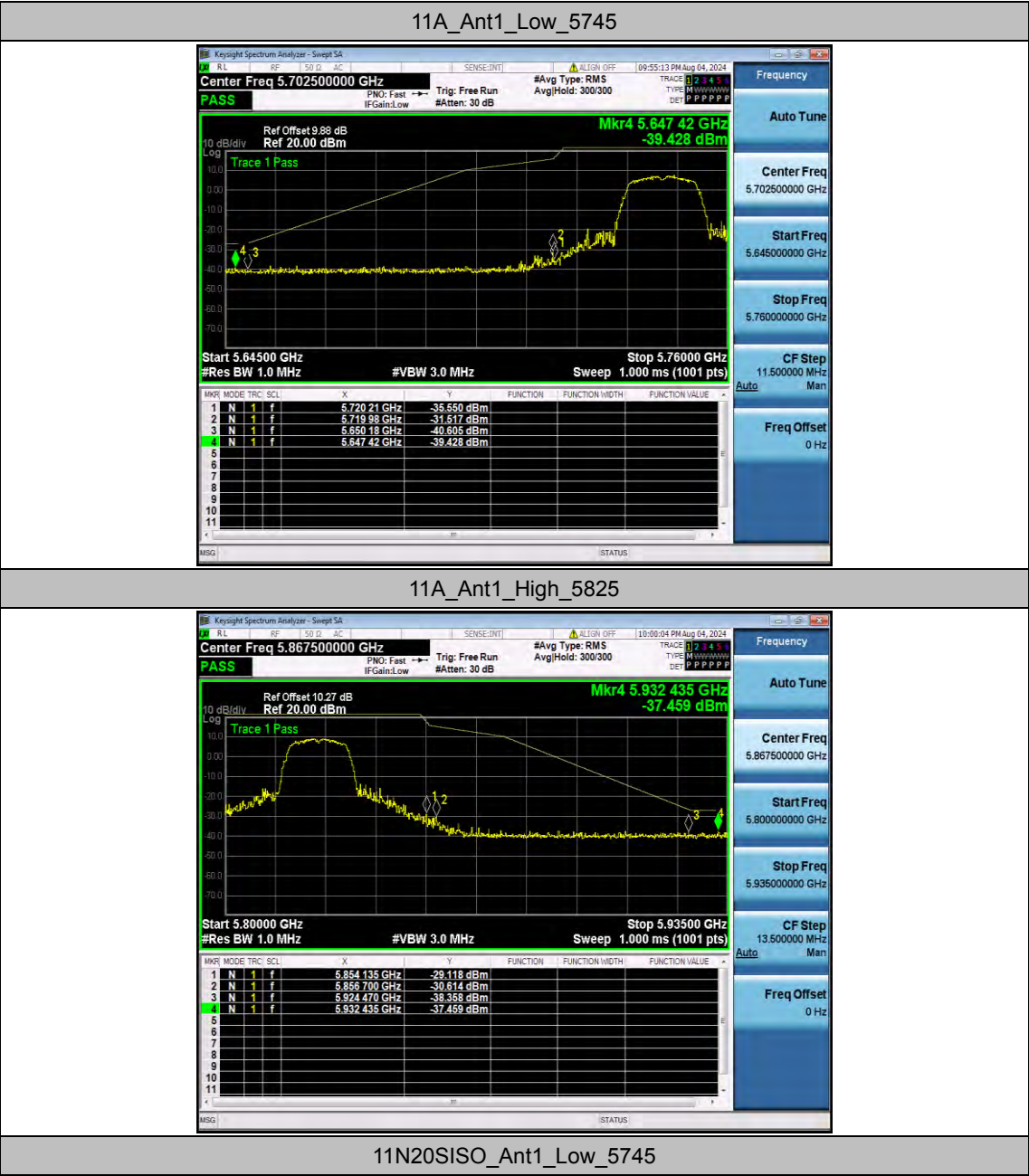
Appendix G.6: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-40.61	≤-26.87	PASS
				5700~5720	-31.52	≤15.59	PASS
				5720~5725	-35.55	≤16.08	PASS
				5760~5650	-39.43	≤-27	PASS
		High	5825	5850~5855	-29.12	≤17.57	PASS
				5855~5875	-30.61	≤15.12	PASS
				5875~5925	-38.36	≤-26.61	PASS
				5925~5935	-37.46	≤-27	PASS
11N20SI SO	Ant1	Low	5745	5650~5700	-39.43	≤-26.62	PASS
				5700~5720	-32.98	≤15.37	PASS
				5720~5725	-30.97	≤17.65	PASS
				5760~5650	-39.6	≤-27	PASS
		High	5825	5850~5855	-30.15	≤16.03	PASS
				5855~5875	-30.09	≤15.46	PASS
				5875~5925	-39.25	≤-26.91	PASS
				5925~5935	-38.41	≤-27	PASS
11N40SI SO	Ant1	Low	5755	5650~5700	-39.04	≤-26.70	PASS
				5700~5720	-22.55	≤15.43	PASS
				5720~5725	-22.96	≤16.66	PASS
				5780~5650	-40.36	≤-27	PASS
		High	5795	5850~5855	-31.42	≤15.66	PASS
				5855~5875	-31.56	≤11.91	PASS
				5875~5925	-38.35	≤-26.83	PASS
				5925~5935	-38.09	≤-27	PASS
11AC20S ISO	Ant1	Low	5745	5650~5700	-39.95	≤-26.70	PASS
				5700~5720	-32.49	≤15.27	PASS
				5720~5725	-31.98	≤18.18	PASS
				5760~5650	-39.33	≤-27	PASS
		High	5825	5850~5855	-31.92	≤16.03	PASS
				5855~5875	-31.6	≤14.48	PASS
				5875~5925	-38.66	≤-26.81	PASS
				5925~5935	-38.58	≤-27	PASS
11AC40S ISO	Ant1	Low	5755	5650~5700	-38.59	≤-26.10	PASS
				5700~5720	-28.2	≤15.54	PASS
				5720~5725	-26.67	≤17.28	PASS
				5780~5650	-38.58	≤-27	PASS

		High	5795	5850~5855	-32.02	≤ 15.66	PASS
				5855~5875	-32.19	≤ 14.13	PASS
				5875~5925	-38.5	≤ -26.95	PASS
				5925~5935	-37.85	≤ -27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-39.37	≤ -26.80	PASS
				5700~5720	-28.94	≤ 10.09	PASS
				5720~5725	-29.34	≤ 15.65	PASS
				5800~5650	-37.63	≤ -27	PASS
		High	5775	5850~5855	-29.12	≤ 15.84	PASS
				5855~5875	-29.08	≤ 11.64	PASS
				5875~5925	-38.22	≤ -26.46	PASS
				5925~5935	-38.18	≤ -27	PASS

Test Graphs B4



11A_Ant1_High_5825

11N20SISO_Ant1_Low_5745



11N20SISO_Ant1_High_5825



11N40SISO_Ant1_Low_5755



11N40SISO_Ant1_High_5795



11AC20SISO_Ant1_Low_5745



11AC20SISO_Ant1_High_5825



11AC40SISO_Ant1_Low_5755



11AC40SISO_Ant1_High_5795



11AC80SISO_Ant1_Low_5775



11AC80SISO_Ant1_High_5775



Appendix G.7: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	3052.25	-40.49	≤-27	PASS
			5925~27000	26092.37	-32.05	≤-27	PASS
		5785	30~5650	5435.5	-40.19	≤-27	PASS
			5925~27000	26503.33	-31.2	≤-27	PASS
		5825	30~5650	3061.62	-40.15	≤-27	PASS
			5925~27000	26077.62	-31.8	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	5447.68	-40.47	≤-27	PASS
			5925~27000	26768.88	-31.81	≤-27	PASS
		5785	30~5650	5473.53	-40	≤-27	PASS
			5925~27000	26955.04	-31.32	≤-27	PASS
		5825	30~5650	3589.9	-39.95	≤-27	PASS
			5925~27000	26629.08	-31.41	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	5435.69	-39.57	≤-27	PASS
			5925~27000	24178.06	-31.63	≤-27	PASS
		5795	30~5650	3076.98	-40	≤-27	PASS
			5925~27000	25158.75	-31.35	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	5580.12	-39.87	≤-27	PASS
			5925~27000	24878.45	-31.68	≤-27	PASS
		5785	30~5650	2649.67	-39.56	≤-27	PASS
			5925~27000	24283.43	-30.81	≤-27	PASS
		5825	30~5650	3290.35	-40.04	≤-27	PASS
			5925~27000	26799.79	-30.73	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5580.31	-40	≤-27	PASS
			5925~27000	24740.06	-32.51	≤-27	PASS
		5795	30~5650	3137.67	-39.64	≤-27	PASS
			5925~27000	23493.12	-30.92	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	5645.13	-40.68	≤-27	PASS
			5925~27000	24192.81	-31.63	≤-27	PASS

Test Graphs

11A_Ant1_5745_30~5650



11A_Ant1_5745_5925~27000



11A_Ant1_5785_30~5650



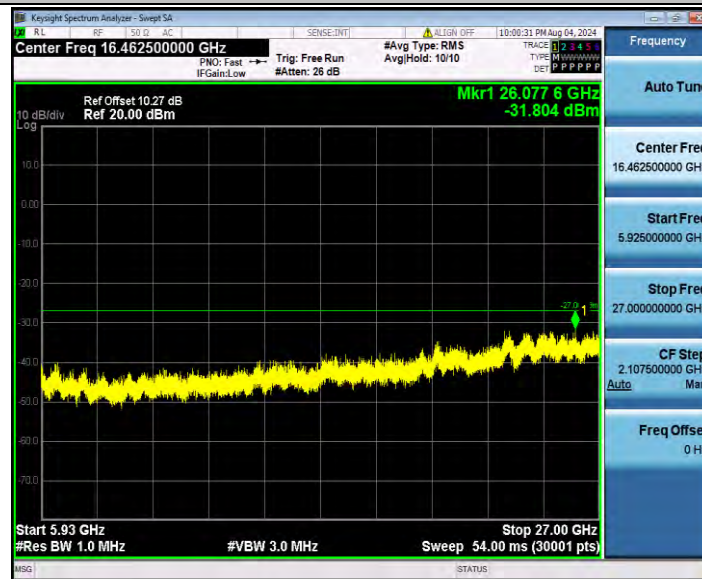
11A_Ant1_5785_5925~27000



11A_Ant1_5825_30~5650



11A_Ant1_5825_5925~27000



11N20SISO_Ant1_5745_30~5650



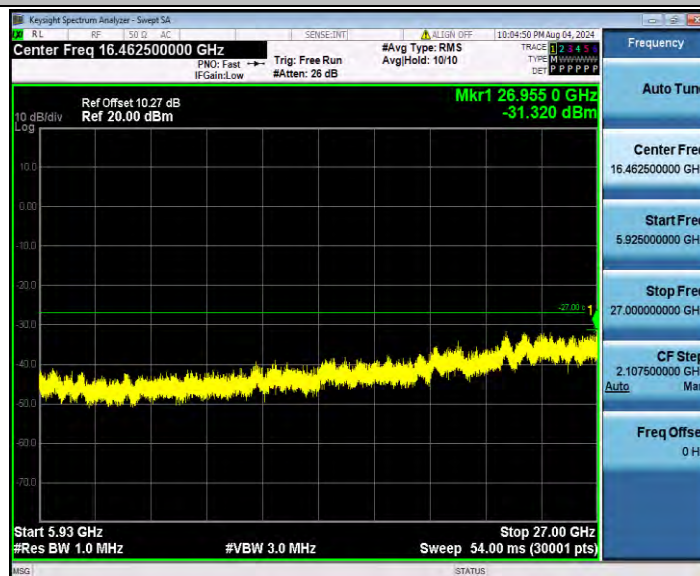
11N20SISO_Ant1_5745_5925~27000



11N20SISO_Ant1_5785_30~5650



11N20SISO_Ant1_5785_5925~27000



11N20SISO_Ant1_5825_30~5650



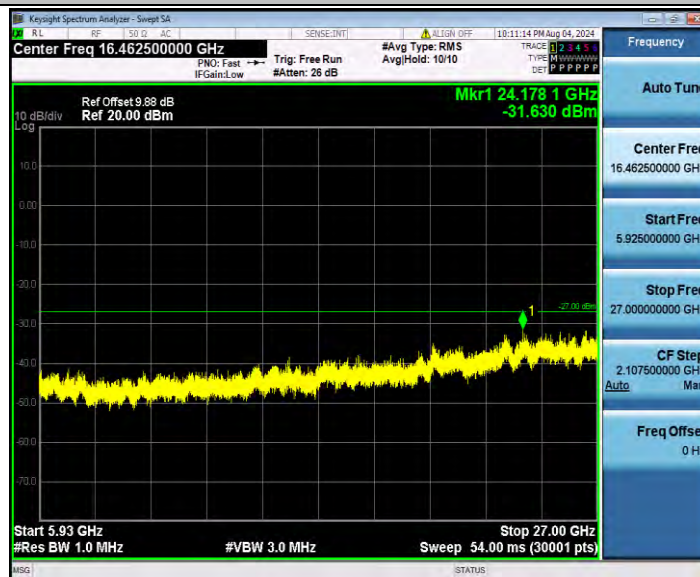
11N20SISO_Ant1_5825_5925~27000



11N40SISO_Ant1_5755_30~5650



11N40SISO_Ant1_5755_5925~27000



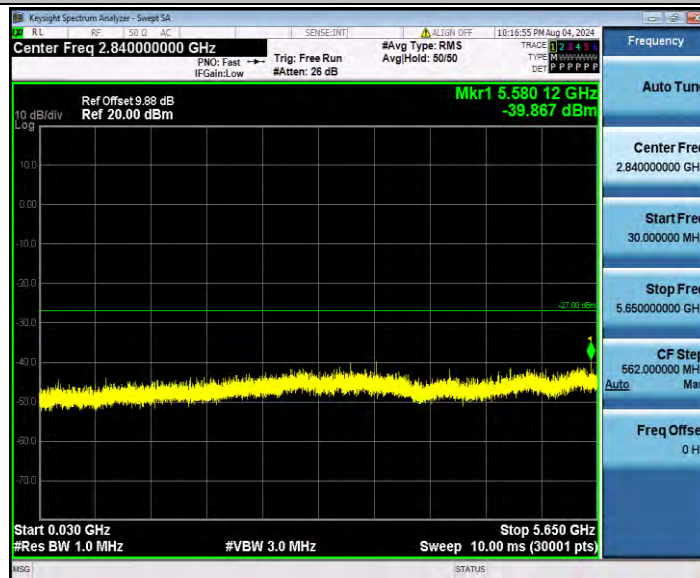
11N40SISO_Ant1_5795_30~5650



11N40SISO_Ant1_5795_5925~27000



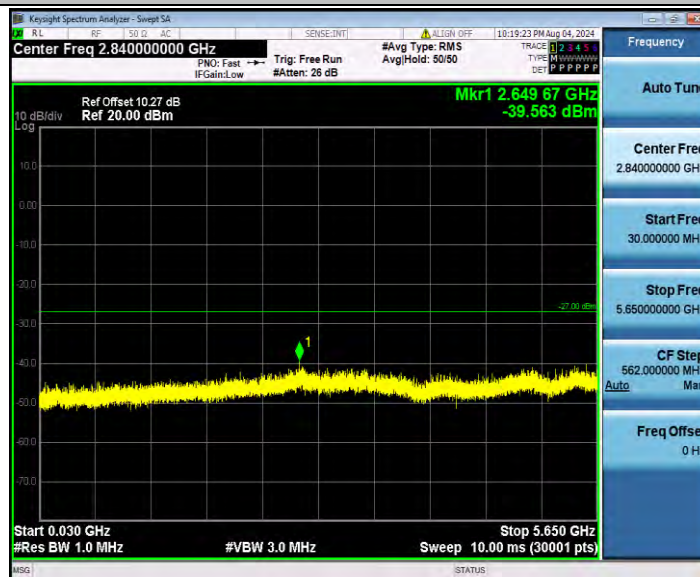
11AC20SISO_Ant1_5745_30~5650



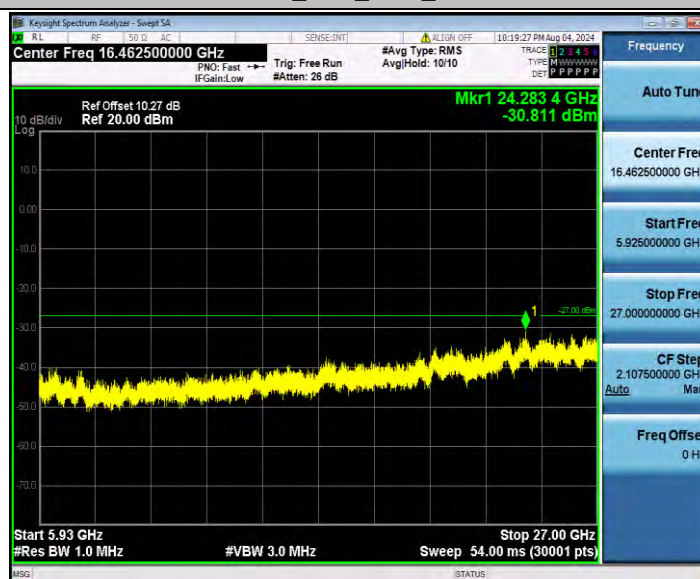
11AC20SISO_Ant1_5745_5925~27000



11AC20SISO_Ant1_5785_30~5650



11AC20SISO_Ant1_5785_5925~27000



11AC20SISO_Ant1_5825_30~5650



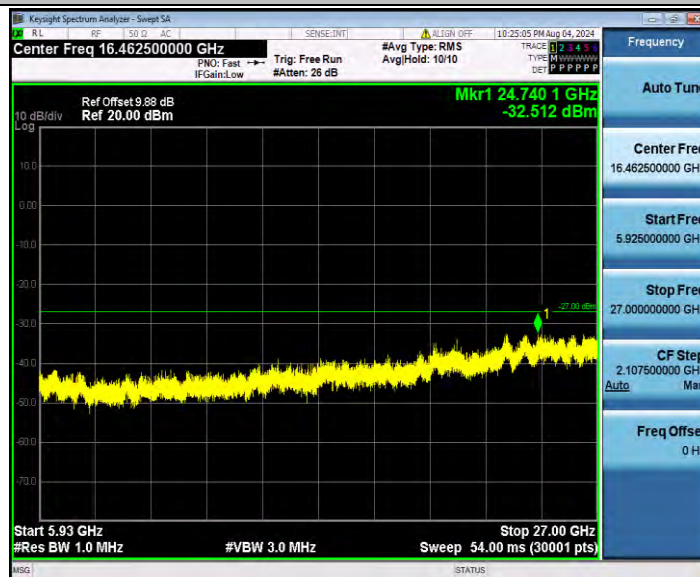
11AC20SISO_Ant1_5825_5925~27000



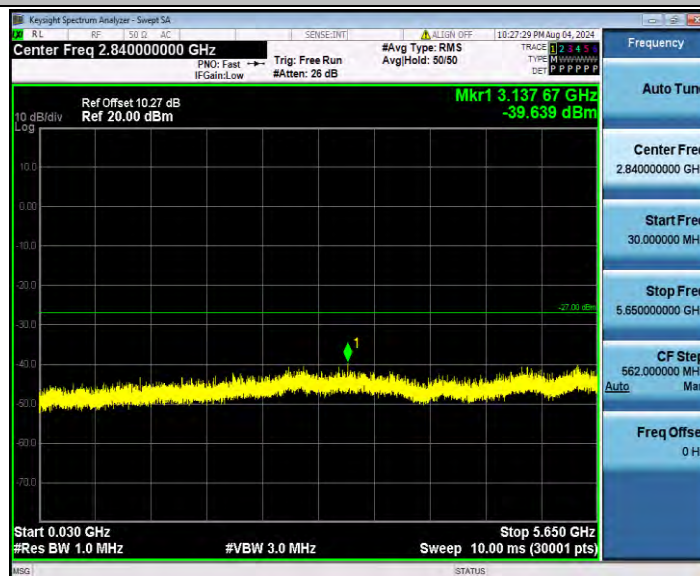
11AC40SISO_Ant1_5755_30~5650



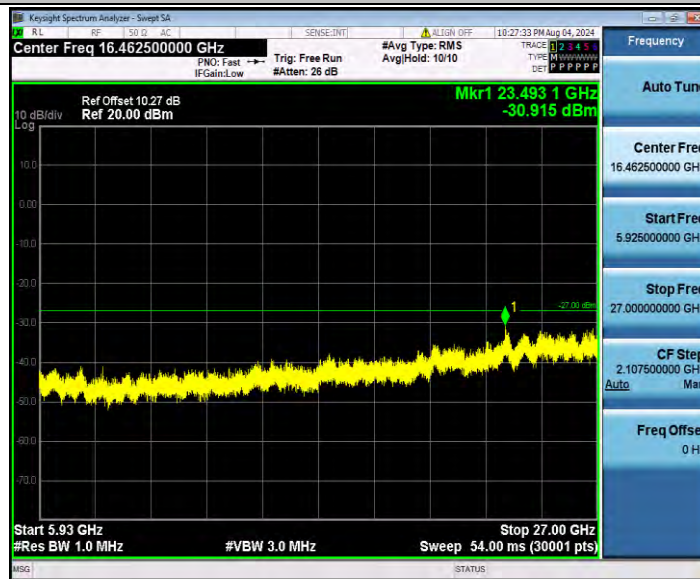
11AC40SISO_Ant1_5755_5925~27000



11AC40SISO_Ant1_5795_30~5650



11AC40SISO_Ant1_5795_5925~27000



11AC80SISO_Ant1_5775_30~5650



11AC80SISO_Ant1_5775_5925~27000



Appendix G.8: Emissions in Restricted Bands

Test Result

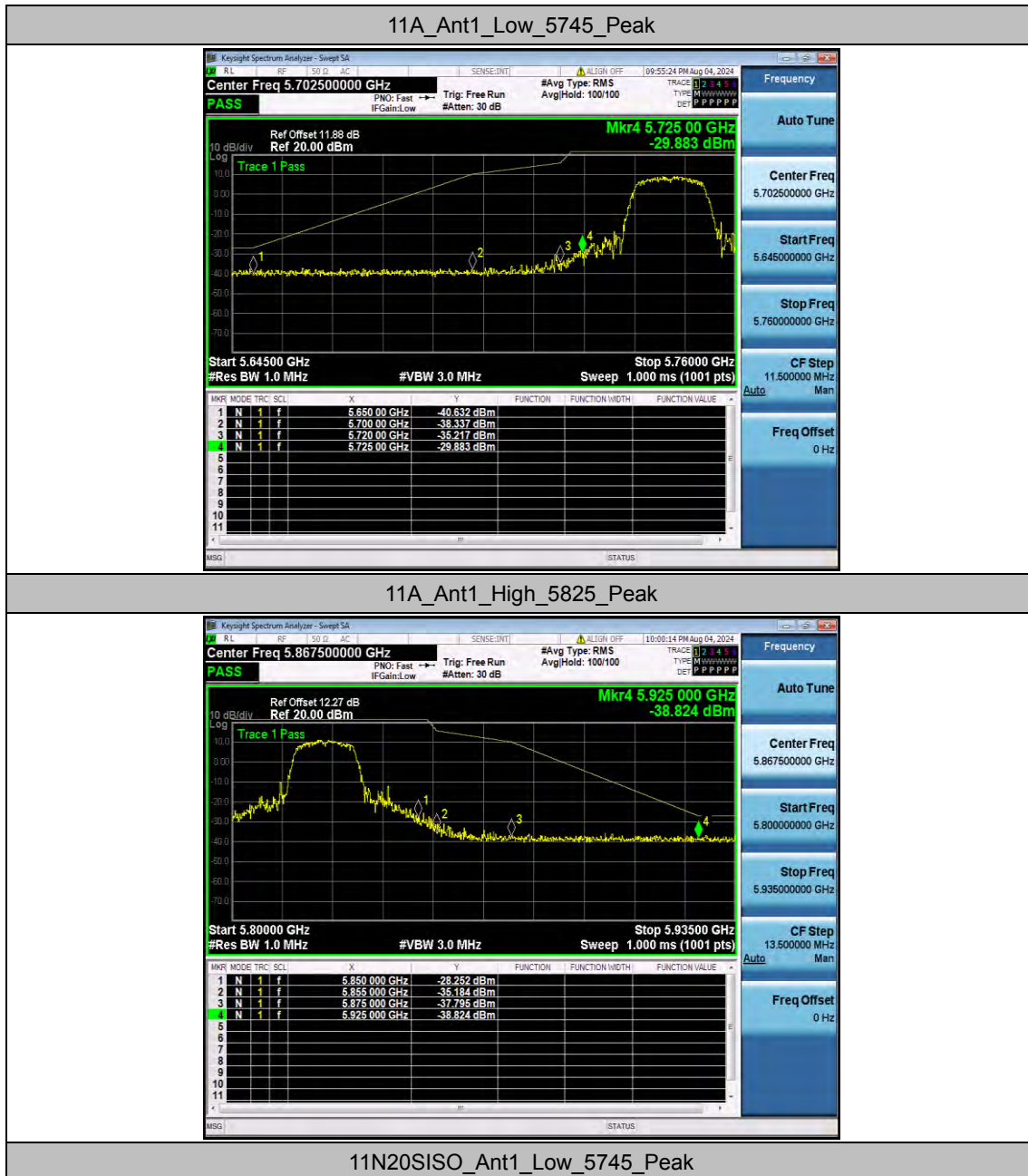
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-40.63 2	≤-27.00	PASS
				Peak	5700.000	-38.34	≤10.00	PASS
				Peak	5720.000	-35.22	≤15.60	PASS
				Peak	5725.000	-29.88	≤27.00	PASS
		High	5825	Peak	5850.000	-28.25 2	≤27.00	PASS
				Peak	5855.000	-35.18	≤15.60	PASS
				Peak	5875.000	-37.8	≤10.00	PASS
				Peak	5925.000	-38.82	≤-27.00	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-37.95 5	≤-27.00	PASS
				Peak	5700.000	-39.17	≤10.00	PASS
				Peak	5720.000	-34.24	≤15.60	PASS
				Peak	5725.000	-31.4	≤27.00	PASS
		High	5825	Peak	5850.000	-30.82 4	≤27.00	PASS
				Peak	5855.000	-31.43	≤15.60	PASS
				Peak	5875.000	-39.03	≤10.00	PASS
				Peak	5925.000	-38.73	≤-27.00	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-41.13 7	≤-27.00	PASS
				Peak	5700.000	-36.28	≤10.00	PASS
				Peak	5720.000	-29.12	≤15.60	PASS
				Peak	5725.000	-25.85	≤27.00	PASS
		High	5795	Peak	5850.000	-31.06 5	≤27.00	PASS
				Peak	5855.000	-32.49	≤15.60	PASS
				Peak	5875.000	-36.54	≤10.00	PASS
				Peak	5925.000	-39.34	≤-27.00	PASS
11AC20SISO	Ant1	Low	5745	Peak	5650.000	-41.14	≤-27.00	PASS
				Peak	5700.000	-40.06	≤10.00	PASS
				Peak	5720.000	-31.89	≤15.60	PASS
				Peak	5725.000	-30.51	≤27.00	PASS
		High	5825	Peak	5850.000	-27.70 3	≤27.00	PASS

				Peak	5855.000	-33.15	≤15.60	PASS
				Peak	5875.000	-38.09	≤10.00	PASS
				Peak	5925.000	-37.84	≤-27.00	PASS
11AC40SI SO	Ant1	Low	5755	Peak	5650.000	-38.59 5	≤-27.00	PASS
				Peak	5700.000	-39.08	≤10.00	PASS
				Peak	5720.000	-28.14	≤15.60	PASS
				Peak	5725.000	-26.36	≤27.00	PASS
		High	5795	Peak	5850.000	-34.12 1	≤27.00	PASS
				Peak	5855.000	-33.7	≤15.60	PASS
				Peak	5875.000	-38.66	≤10.00	PASS
				Peak	5925.000	-40.72	≤-27.00	PASS
11AC80SI SO	Ant1	Low	5775	Peak	5650.000	-39.114	≤-27.00	PASS
				Peak	5700.000	-31.46	≤10.00	PASS
				Peak	5720.000	-25.54	≤15.60	PASS
				Peak	5725.000	-29.53	≤27.00	PASS
		High	5775	Peak	5850.000	-29.44 5	≤27.00	PASS
				Peak	5855.000	-26.35	≤15.60	PASS
				Peak	5875.000	-32.85	≤10.00	PASS
				Peak	5925.000	-39.27	≤-27.00	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





11N20SISO_Ant1_High_5825_Peak



11N40SISO_Ant1_Low_5755_Peak



11N40SISO_Ant1_High_5795_Peak



11AC20SISO_Ant1_Low_5745_Peak



11AC20SISO_Ant1_High_5825_Peak



11AC40SISO_Ant1_Low_5755_Peak



11AC40SISO_Ant1_High_5795_Peak



11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak

